

1961, *H. Deka* 24537 (CAL-6035); Jayantea hills, 1000 m, Aug. 1889, *s. l. s. n.* (CAL-19839); 49 miles from Jowai, May 31, 1965, *N. P. Balakrishnan* 42298 (CAL-6406); Khasia, *Hooker et Thomson s. n.* (CAL-19841); Khasia, *s. l. s. n.* (CAL). Sikkim: Sonada, \pm 1600 m, Jan. 24, 1909, *R. E. Cooper* 694 (CAL); Rinchingpong to Gassing, \pm 1500 m, *T. Anderson* 1449 (CAL-19843); Sikkim, \pm 2100 m, *J. D. Hooker s. n.* (CAL-19849).

West Bengal: Karseong, \pm 1200, July 1974, *J. S. Gamble s. n.* (DD); Rongting, March 14, 1938, *K. Biswas* 4813 (CAL); Karseong — Way to Dow hill, Darjeeling, Oct. 3, 1974, *R. D. Dixit* 53123 (CAL-4159); Karseong, \pm 1200 m, July 1874, *Gamble* 5609A (CAL). Karseong, 1200 m, July 30, 1879, *H. C. Levinge s. n.* (CAL); Kalimpong, June 1958, *S. Nakao*

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s. n. (CAL); Meghma *R. D. Dixit* 52993 (CAL-4848).

BHUTAN: Kamgi, \pm 1200 m, Sept. 16, 1965, *G. Sengupta* 2120 (CAL).

Distribution: India — Eastern Himalayas, Nepal, Bhutan, Malaysia-Java.

South Indian locality of this taxon referred by Beddome is an error.

Oleandra neriformis Cavanilles An. Hist. 1(2): 115, 1799.

Specimen examined: Luzon, (Type locality) Mouben, Phillippense, *Cuming* 94 (CAL) (authentic material cited by J. D. Hooker).

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S. R. GHOSH

32. *PALIURUS* MILL. (RHAMNACEAE) — A GENUS NEW TO INDIA

(With three text-figures)

While working on the taxonomy of the family Rhamnaceae in the Central National herbarium, Botanical Survey of India, Howrah, (CAL), I came across an interesting herbarium sheet, collected from Kainshli, Chamba district (Himachal Pradesh) in the N. W. Himalayan region by J. H. Lace. The plant specimen apparently looks like *Zizyphus* sp. but on careful checking can be easily identified as *Paliurus* sp. in having the following differences:

The taxon is studied and compared with gatherings from the different regions like Western Asia, Europe and U.S.S.R., in CAL and properly identified with the help of literature and microfisches of the available type specimens.

Paliurus spina-christi Mill., a straggling shrub, is of great religious importance. It

<i>Paliurus</i>	<i>Zizyphus</i>
1. Fruits dry, indehiscent surrounded by a circular leathery wing. (Fig. 2).	1. Fruits fleshy, wing absent (Fig. 3).
2. Seeds flattened, erect, with a little albumen.	2. Seeds plano-convex, erect, albumen almost absent.

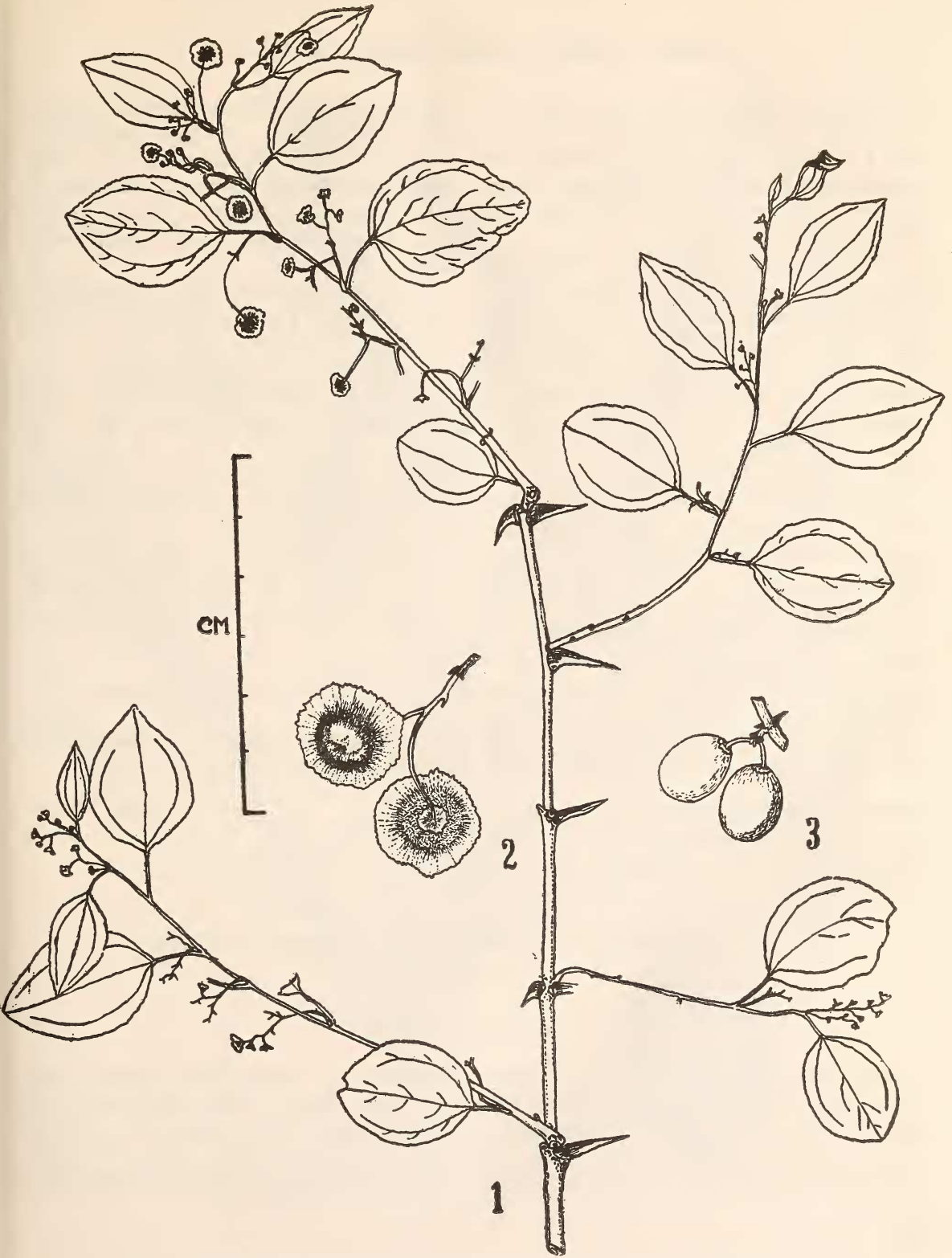


Fig. 1. *Paliurus spina-christi* — plant (in part); Fig. 2. Fruits of *Paliurus*;
 Fig. 3. Fruits of *Zizyphus*.

is commonly known as the Christ's thorn as it is believed to be the plant from which the crown of thorn was made. It is generally distributed from South Europe to Japan, but was not reported from India so far and hence is of Phytogeographical interest.

The species is described below in detail with a view to facilitate its easy identification.

Paliurus spina-christi Mill. Gard. Dict. ed. viii. 1768; Post & Dinsmore, Fl. Syria, Palestine and Sinai 1:288. 1932; Hara & Williams, Enum. Fl. Pl. Nepal 2:91. 1979. *Rhamnus paliurus* L. Sp. Pl. 194. 1753. *P. aculeatus* Lamk. Tabl. Encycl. 1. t. 210. 1797; G. Don Gen. Syst. 2: 23. 1832. (Fig. 1).

Shrubs; branches round with minute pubescence on the younger parts. Spine of both types, smaller hooked, larger straight. Leaves ovate to elliptic-ovate, 2.0-3.5 x 1.3-2.5 cm, acute to obtuse, entire to minutely serrulate, usually oblique at base, prominently 3-nerved, scarcely pubescent along the nerves on both surfaces, glabrous; petioles 0.3-0.7 cm, grooved ciliate. Flowers in cymes, umbellate, few; peduncle 0.4-0.9 cm long, pedicels about 5 mm long and about 1.0 cm in fruits. Calyx 5-cleft,

spreading, sepals glabrous, persistent; petals 5, convolute. Stamens 5, protruding; anthers ovate, 2-celled. Disk flat, pentagonal. Ovary 3-celled, half immersed in the disk; styles 2-3. Fruit dry, indehiscent surrounded by a circular leathery wing, 3-celled, 3-seeded. Seeds flattened with a little albumen.

Specimens Examined: INDIA: Himachal Pradesh, Chamba, Kainshli, 7000 ft., 4.6.1896, *J. H. Lace* 1404 (CAL).

PERSIA: Without any precise locality, Thanss s. n. Acc. No. 87985 (CAL—Ex Herb. Kew); Kurdistania, *O. Stapf* s. n. Acc. No. 87984 (CAL).

SYRIA: Tericho, 1863-64, *B. T. Lowne* s. n. Acc. No. 87981 (CAL); Ad Jokat, Anatoliae, *H. F. Hance* 4646 (CAL).

SWITZERLAND: Pont Du Gard, Nimes, June 1891, *J. Roberts* s. n. Acc. No. 87993 (CAL).

USSR: Tadjikistan, 24.6.1963, *Seraliev* s. n. (CAL).

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33. OCCURRENCE OF *ELAEOCARPUS GRANDIFOLIUS* KURZ IN ASSAM

(With a text-figure)

During the course of identification of *Elaeocarpus* material collected from Arunachal Pradesh, I came across an obscurely determined specimen of *Elaeocarpus* (fruiting) deposited in Forest Research Institute Herbarium, Dehra

Dun. This was collected from Jeypore Range, Lakhimpur, Assam in 1934. After critical study of the literature, the specimen was identified as *Elaeocarpus grandifolius* Kurz. The determination was later confirmed by the Central